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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/824,248	04/14/2004	Dragan Veskovc	LUTR-0241/03-055 P2	6423
23377 7590 07/21/2008 WOODCOCK WASHBURN LLP CIRA CENTRE, 12TH FLOOR 2929 ARCH STREET PHILADELPHIA, PA 19104-2891				
EXAMINER				
VO, TUYET THI				
ART UNIT		PAPER NUMBER		
2821				
MAIL DATE		DELIVERY MODE		
07/21/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/824,248

**Applicant(s)**

VESKOVIC ET AL.

**Examiner**

TUYET VO

**Art Unit**

2821

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 February 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-92 is/are pending in the application.
- 4a) Of the above claim(s) 1-14, 26-36, 38-69 and 76-82 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 25, 37, 70, 71 and 83-92 is/are rejected.
- 7) ☐ Claim(s) 72-75 is/are objected to.
- 8) ☒ Claim(s) 76-82 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 7/30/2007
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

**The applicant's reply filed February 28, 2008 to add more claims 70-92 in response to the office action sent 6/14/2007, wherein claims 76-82 drawn to different invention. Accordingly, claims 1-92 are currently presented in the application, claims 25 and 37 have been examined, claims 1-24, 26-36 and 38-69 have been withdrawn while new claims 76-82 with non-obvious features have been restricted as follow.**

### **Response to Amendment**

1. Newly presented Claims 76-82 are directed to different inventions those are distinct from the invention originally claimed, and examined in the previous office action dated 6/14/2007.
2. Newly presented Claims 76-82 are redirected to an invention that is species distinct from the invention originally claimed for the following reasons:
  - I. Claims 25 and 37 are as originally presented, drawn to a driver circuit for energizing a gas discharge lamp, wherein a microprocessor is used to directly control an inverter for adjusting frequency and duty cycle of output lamp signals. The newly add claims 70-75 and 83-92 direct pulse width modulation for controlling the duty cycle and some different types of commands to communicate with the microprocessor, therefore, the claims 70-75 and 83-92 are considered as obvious operating features related to

claim invention shown in the amended claims 25 and 37. Accordingly, claims 70-75 and 83-92 will be examined with the amended claims 25 and 37.

II. Claims 76-82, newly presented a plurality of ballast sense signals directed to detecting lamp current, fault condition as shown in claims 76-78, conditioning preheating and striking features required in claims 79 and 80; and require second ballast communicate to microprocessor as shown in claims 81 and 82. Such these above features are non obvious and required a major search to different areas.

3. As disclosed above, the newly presented claims 76-82 are patentably distinct from the original claims 25 and 37 and newly added claims 70-75 and 83-90, therefore are considered a different invention.

4. Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for **prosecution on the merits. Accordingly, Claims 76-82 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 818.02(a) and 821.03.**

5. **The amendment filed on 02/28/2008 newly add claims 70-92 which are drawn to a distinct invention different from the original presented invention is considered as improper or non-responsive (MPEP § 821.03).**

6. This application contains claims 1-24, 26-36 and 38-69 are drawn to an invention nonelected with traverse in the reply filed on 3/01/2007. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 25, 70, 71, 83, 84, 85 and 88 are rejected under 35 U.S.C. 102(e) as being anticipated by Bogdan (US Pat. 6,040,661).

Bogdan discloses an electronic ballast (110 in Fig. 7) for driving a gas discharge lamp, comprising:

an inverter (118) for producing a high frequency drive voltage for driving a lamp current in said gas discharge lamp (122), said drive voltage having an operating frequency and an operating duty cycle;

a microprocessor (128, 125) electrically connected to said inverter for directly controlling said inverter (118) to control said lamp current, said microprocessor operable to provide an output signal to said inverter, such that said operating frequency and said operating duty cycle of said drive voltage are substantially the same as a frequency and a duty cycle of said output (col. 8, lines 16-25), wherein said microprocessor modulates switch transistors (Q1, Q2) by square wave output (Fig. 5 A) to provide frequency and

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duty cycle of inverter for driving the lamp (col. 8, lines 12-25), and wherein said microprocessor controls controllable conductive devices ( $L_L$ ,  $L_{LF1}$ ,  $L_{LF2}$ , Fig. 8) between conductive and non-conductive state via switches (Q1, Q2) when a current through the conductive device reaches a threshold, sufficient charge, to start the lamp (col. 10, lines 15-32); and

a port (127) in electrical communications with said microprocessor for sending messages comprising at least one of a command and a ballast configuration via a host computer (col. 8, lines 57-59), wherein ballast included said port can be implemented to adapt a digital protocol link or digital address lighting interface (DALI) to control particular address of the target ballast for communicating/transmitting information, such as dimming, from the host computer or user (col. 8, lines 45-59 and col. 10, lines 57-67 and col. 11, lines 1-6).

### ***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 25, 37, 86, 87 and 89-92 are rejected under 35 U.S.C. 103(a) as being unpatentable by Bogdan (US Pat. 6,040,661) in view of Sid (US Pat. 6,761,470).

Bogdan discloses an electronic ballast (110 in Fig. 7) for driving a gas discharge lamp, comprising:

an inverter (118) for producing a high frequency drive voltage for driving a lamp current in said gas discharge lamp (122), said drive voltage having an operating frequency and an operating duty cycle;

a microprocessor (128, 125) electrically connected to said inverter for directly controlling said inverter (118) to control said lamp current, said microprocessor operable to provide an output signal to said inverter, such that said operating frequency and said operating duty cycle of said drive voltage are substantially the same as a frequency and a duty cycle of said output (col. 8, lines 16-25); and

a port (127) in electrical communications with said microprocessor for sending messages comprising at least one of a command and a ballast configuration via a host computer (col. 8, lines 57-59), wherein ballast included said port can be implemented to adapt a digital protocol link or digital address lighting interface (DALI) to control particular address of the target ballast for communicating/transmitting information, such as dimming, from the host computer or user (col. 8, lines 45-59 and col. 10, lines 57-67 and col. 11, lines 1-6).

However, Bogdan does not disclose two ports connected to said microprocessor as required in the claim invention.

Sid discloses network lighting system using microcontroller (200) for driving a light (col. 7, lines 58-67 and col. 8, lines 50-67), wherein said microcontroller (200) having at least two ports for sending (30) and receiving (32) command messages (col.

6, lines 30-50 and col. 8, lines 4-8), Bogdan further comprise infrared/radio frequency (IR/RF) port connecting to the microcontroller (200) for communicating with a hand held device (col. 6, lines 51-67).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize multiple ports connected to a microcontroller as taught by Sid lighting network into the Bogdan programmable lighting system in order to extend a controlling ability of a lighting system in a desire manner via user inputs/commands. Such implementation is considered as a routine skill in the art.

#### ***Allowable Subject Matter***

11. Claims 72-75 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

12. The following is a statement of reasons for the indication of allowable subject matter: the prior fails to establish **said inverter further comprises a transformer characterized by a magnetizing inductance, said microprocessor operable to use a computational module of said magnetizing inductance to determine when said current through said controllably conductive device reaches said threshold level** as required in claim 72.

#### ***Citation of pertinent prior art***



13. The prior art made of record and not relied upon is considered pertinent to applicants' disclosure. See prior arts/references listed on the PTO-892 form attached.

### ***Correspondence***

**Applicant's amendment necessitated the new ground(s) of rejection presented** in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuyet Vo whose telephone number is 571 272 1830. The examiner can normally be reached on Mon-Wed and Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas Owens can be reached on 571 272 1662. The fax phone numbers for the organization where this application or proceeding is assigned are 571 273 8300 for regular communications and for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571 272 2800.

Information regarding the status of an application or status information for publishing/unpublishing applications may be obtained from the Patent Application Information Retrieval (PAIR) system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the PAIR system, contact the Electronic Business Center (EBC) at toll free 866-217-9197.

/Tuyet Vo/

Primary Examiner, Art Unit 2821

July 07, 2008